INFORMATION TECHNOLOGY
SAMPLE VENDOR SOFTWARE ARCHITECTURE PLAN

FOR: AGENCY ARCHITECTURE REVIEW

CREATED BY:

REVIEWED & APPROVED DATE:

AUGUST 04, 2008

VERSION 1.0

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A. PIMS/KnowledgeLake Software Description

The Photo and Image Management System (PIMS) is an Intranet application that allows Ecology staff to store electronic photograph files (and other image files), search the system for photographs that meet flexible search criteria, and access photographs within a secure framework.

The system is built on top of the Microsoft SharePoint platform and the KnowledgeLake Imaging Server application. SharePoint provides basic functions for document management and security. The KnowledgeLake software provides additional capabilities specific to managing images, scanning of images, and searching for images. Note that scanning hard copy documents to create image files is out of scope for this first release of the system, but the chosen platforms will allow scanning to be included in the future.

ImageSource, the system integrator for this project, will configure and install this system.

Software Cost:

Server Software + license	$35,690
Annual Maintenance Cost	$6,818
Client Cost per desktop	$195
Other Cost (Maint. per desktop)	43

Number of intranet (Ecology) users: Initial deployment 10 users
Evolves to support 1600 users

Number of internet (public) users: None

Why are we doing this project (the business need)?

Although PIMS meets the general needs of information storage and retrieval for all Ecology employees, the first release of PIMS is focused on aiding the work of Ecology's field personnel as they create photos of ecologically significant objects, such as spill sites and hazardous waste sites. System features include:

- A user interface that enforces data entry of photo metadata elements, according to Ecology business rules, when the photo is entered into the system.
- Auto-population of some metadata fields to make metadata entry easier and less subject to error
- Indexing the photos using multiple indexes to meet the search needs of the various groups within Ecology that will use the system
- A versioning system that allows multiple versions of the photo while maintaining a secure, unmodified copy of the original version
- A log of photo system activity that records, for each photo, every instance of modification and modifier

What other products did you consider as alternatives?

Other Knowledge Management (KM) systems pioneers have built systems on their own platforms. Their products are much more expensive than KM systems built on the SharePoint platform. With our budget and environment, only a SharePoint based solution was realistic.

Through the DIS Professional Services contract, we solicited vendors that build solutions based on (or interfacing with) SharePoint, such as OTB Solutions, Fujitsu, Veripic, and others. Only ImageSource submitted a proposal that met our requirements.

B. Tools, Technologies and Architecture Approach

Development Tools: n/a

Technologies:

- SharePoint – MOSS 2007
- .NET

Architecture Approach: Propriety software built on SharePoint web parts and .NET

Integration Strategy:

- A standalone system, but can do auto-fill to enhance user experience via database lookups to ERTS, Facility-Site

Security Strategy:

- Intranet users only
- Uses Active Directory to identify user login name and user's Program

Backup Strategy:

- The agency enterprise servers host this application and database, which are backed up by the network group
- Also requires SharePoint backup [check this]

C. Software and Hardware Requirements and Dependencies

1. Server requires MOSS 2007
2. Server can be hosted on a virtual server
3. **Server CPU**: Dual processors that are 3 GHz or faster
4. **Server RAM**: 2 GB RAM minimum
5. User machine requires a web browser
6. User machine requires a client, KnowledgeLake Connect, a 7MB executable
7. The desktop screen resolution should be at least 1024 x 768

Other Helpful information about the software:

The KnowledgeLake server software has been certified to run in the Microsoft virtual hosting environment. KnowledgeLake and Image Source (the system integrator on this project) have committed to making the software run in the VMWare virtual hosting environment.

D. Operation and Support questionnaire

- Is installation instruction available? Describe the minimum skills required to perform the installation.

  ImageSource will configure and install the software on our dev environment and train us to move the system to the production environment. Installation requires an experienced server administrator with basic SharePoint skills.

- Will this software require users to have read / write access to the server?

  No. End users require only a web browser.

- Describe the skills required for end users to enter photos and search for photos. (For example, is operation intuitive enough for self-learning, self-learning from online tutorials, or would they need to learn from a class?)

  The project goal is to implement forms that are intuitive enough for any user to learn via a tutorial. Some experience with SharePoint would be helpful, but not essential.

- Describe cross-training plan to address employee turn over.

  Same as above.

- Identify or suggest the technical support unit/personnel for this product when it is in the production? Who would be the point of contact for users for day-to-day operation?

  Each region/department would have a “power user” to provide first level support to end users. The project manager will act as the coordination point or inquiries from the power users to ImageSource and KnowledgeLake support.

- Who will manage security and access rights for users?

  Once the admin sets up the “power users”, the power users can manage the security settings for end users via the SharePoint security architecture.

- Is there any concern the that incompatibility issues may occur when the agency upgrades the Microsoft operating system, service packs or the Microsoft Office applications? Do you have any or suggestions on how to deal with such problems?

  No. KnowledgeLake and ImageSource are committed to keeping up with Microsoft SharePoint and operating system upgrades

- Is there any concern or suggestion to address the possibility of conflict when the vendor is no longer supporting the old version but implementing the new one will cause problem to Ecology infrastructure?

  No, based on the vendor’s past record with upgrades.

- Do other Programs have a need for the functionality provided by this product?

PIMS will be used (eventually) by all Ecology staff.

- Are there other products currently in use in Ecology that have a similar function?

  No.

- Once the installation is complete, what level of permissions does the "administrator" of need? Do they need to be part of the server administrator group?

  Yes, they need to be part of the server administrator group.

- Is the product licensing tied to "servers" or CPU? By enterprise?

  Licensing is mainly tied to servers, but has a limit for concurrent users and named users. Initially, we will also be using a client on the user desktop and that client has a per-desktop license fee. In the future, we plan to eliminate the per-desktop fee, through negotiation, or if necessary, by implementing the desktop client software in house.

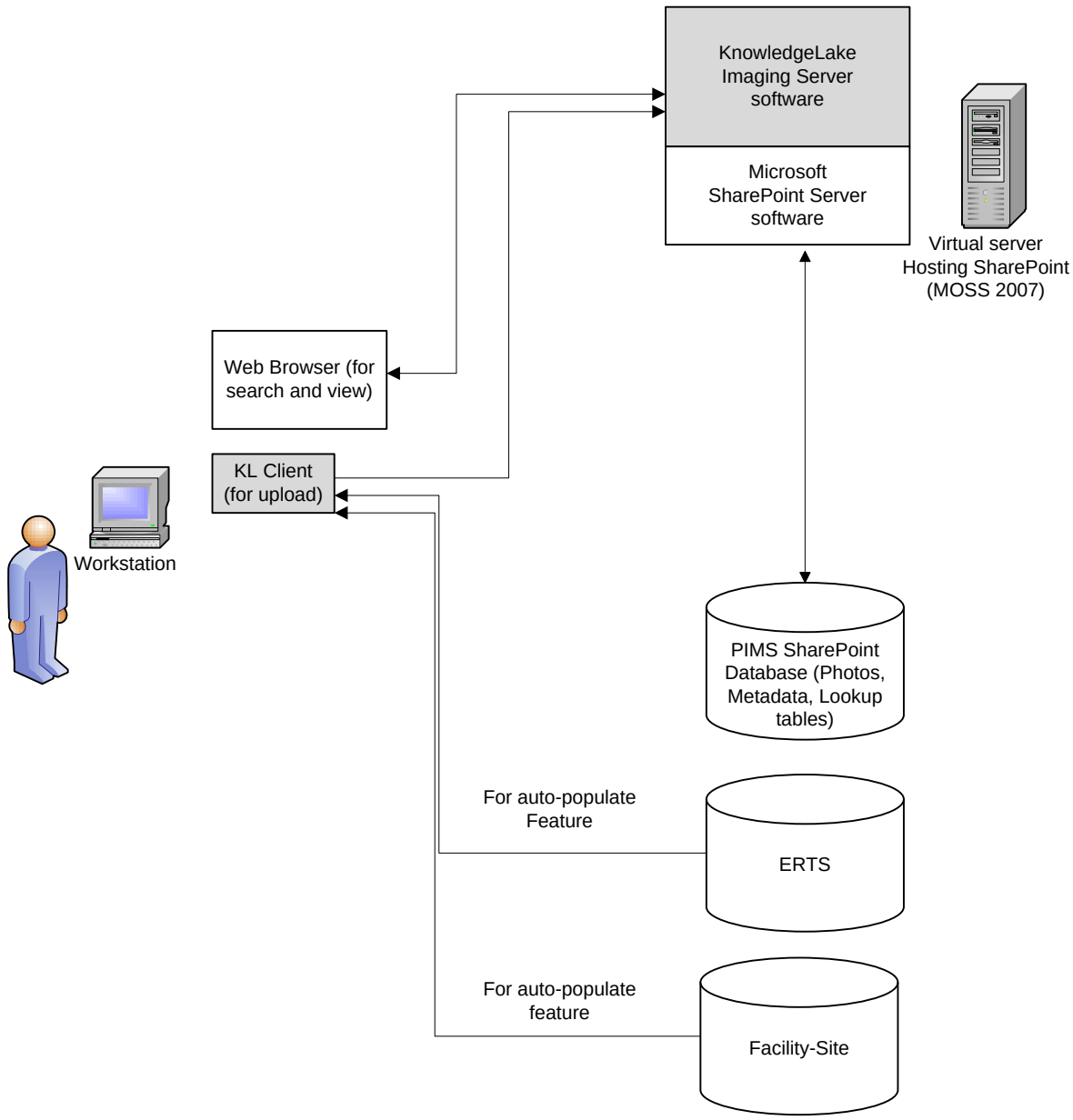
- Are there any licensing issues related to the use of the product on virtual servers?

  No.

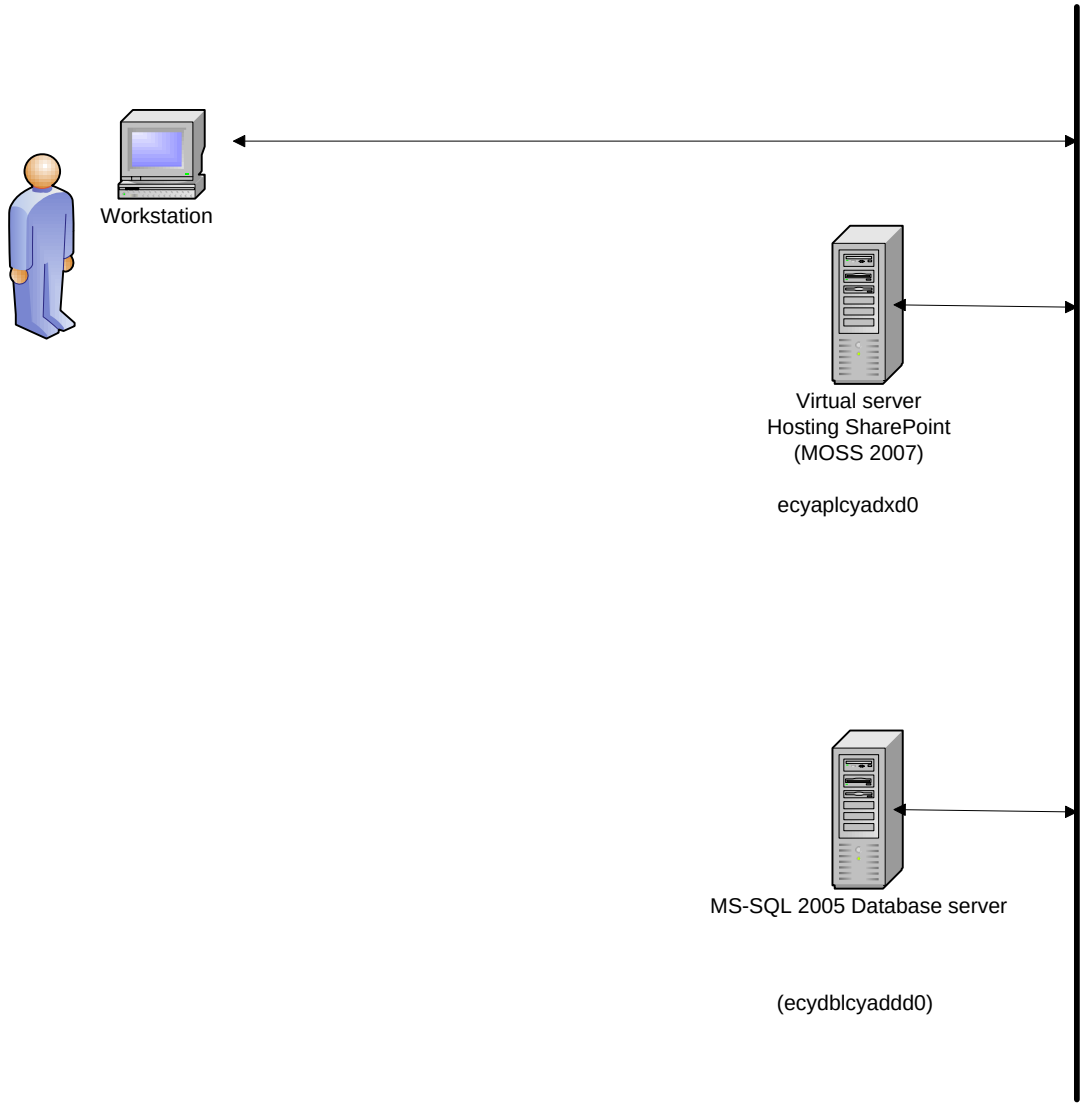
- Are there any licensing issues related to its use in a clustered or NLB environment?

  No.

E. Software Context Diagram



F. Software Environment (Servers) Diagram



G. Review History

Date	Version	Review Session	Attendees/Invitees

Review Notes: